MAGNETIC TILT AND RAISE/LOWER MECHANISMS FOR a VENETIAN BLIND

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ABSTRACT OF THE DISCLOSURE

Magnetic tilt and raise/lower mechanisms for a venetian blind disposed between the glass panes of a multi-pane window are disclosed. The magnetic mechanisms act on tilt lines and a raise/lower line coupled to the venetian blind. An inner follower carriage is magnetically coupled to an external carriage moveable over one of the glass panes. Movement of the external carriage imparts movement of the follower carriage, which in turn actuates the tilt or raise/lower lines, causing the venetian blind to move. The inner follower carriage and the external carriage include at least one magnet assembly mounted on at least one wheel set to facilitate movement of the carriages over the glass panes as well as to reduce the force required to raise or lower the venetian blind. A multiplier is employed to reduce the stroke length required to raise or lower the venetian blind. Further, a clutch coupling an external slider to the external carriage is provided and to disconnect the slider from the external carriage upon the application of a force exceeding a threshold level.

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